

REMARKS

Reconsideration of this application is respectfully requested. Applicant confirms that claims 21-23 have been withdrawn in view of the USPTO restriction requirement.

The rejection of claim 1 as being anticipated by Cleary (U.S. Patent No. 6,778,937) is traversed. Cleary discloses a gas turbine having a combustion chamber and an array of temperature sensors in the exhaust duct of the gas turbine. Data from the exhaust duct temperature sensors is plotted (see graph 328 in Figure 2 of Cleary) to show a estimated profile of temperature levels in the combustion chamber. Cleary does not show several features of claim 1 including transmission of data to a computer system “proximate to a control interface for the combustor” and a sequence of graphical representations of combustion conditions over a period of time. Accordingly, there is no anticipation by Cleary.

Claim 1 has been amended to require the acquisition of a sequence of graphical representations of computer combustion product conditions. This feature is not shown in Cleary.

The rejection of claims 2 to 20 as being obvious over Cleary in view of Peterson (U.S. Published Patent 2004/0183800 A1) is traversed for substantially the same reasons as stated above with respect to claim 1. In particular, the combination of Cleary and Peterson do not teach or suggest the acquisition of a sequence of graphical representations of combustion product conditions in a combustion gas path or the presentation of these conditions on a computer system proximate to the control interface to the combustor.

Cleary teaches a diagnostic system for determining temperature levels in combustion cans arranged annularly around a combustion chamber in a gas turbine. The plot in Figure 2 of Cleary shows differences in combustion can temperature from a mean chamber temperature. The plot enables operators of the gas turbine to identify a combustion can running particularly

Dean DRAXTON et al.
Appl. No. 10/773,286
July 15, 2005

hot or cold. Cleary mentions re-plotting the combustion can temperature differences at column 11, lines 13-15 which state that the chart may be re-plotted to provide an indication of how much hotter or colder the chambers have become due to a change in combustion conditions. Cleary does not suggest acquiring a sequence of graphical representations of combustion product conditions over a period of time as is now recited in claim 1. Cleary also does not suggest tracking changes in combustion conditions as is done by graphing combustion product conditions over time.

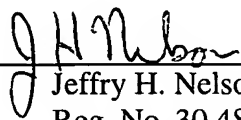
Peterson discloses a method for visualizing multi-dimensional data. Peterson does not teach a technique for monitoring combustion conditions or acquiring a sequence of combustion conditions. The combination of Cleary and Peterson would not result in the claimed invention of acquiring a sequence of combustion product conditions that can be graphically plotted to show how combustion conditions change as control conditions are varied.

All claims are in good condition for allowance. If any small matter remains outstanding, the Examiner is requested to telephone applicants' attorney. Prompt reconsideration and allowance of this application is requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____


Jeffrey H. Nelson
Reg. No. 30,481

JHN:glf
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100